7.10 <u>Aesthetic Resources</u>

7.10.1 Overview

This section discusses aesthetic resources associated with Yuba County Water Agency's (YCWA or Licensee) Yuba River Development Project (Project). In addition to this overview, this section is divided into three general subsections: Section 7.10.2, Regional Context; Section 7.10.3, Visual Resource Management Plans; and Section 7.10.4, Aesthetic Character in the Project Area.¹

A detailed description of Project facilities and features can be found in this Pre-Application Document in Section 6, Project Location, Facilities, and Operations, and a detailed description of the land use and ownership can be found in Section 7.9, Land Use.

7.10.2 Regional Context

The Project is located primarily in eastern Yuba County, with a small portion in southwestern Sierra County and a very small portion in Nevada County, California. This project is located along the Yuba River, North Yuba River, Middle Yuba River, and Oregon Creek. The United States Department of Agriculture (USDA) Forest Service (Forest Service) manages a majority of federally owned land in the Project Area as National Forest System (NFS) land. In addition, part of the project associated with Narrows 2 Powerhouse is located on United States Army Corps of Engineers (USACE) lands. NFS lands north of the North Yuba River are part of the Plumas National Forest (PNF), and NFS lands to the south are part of the Tahoe National Forest (TNF). United States Department of Interior, Bureau of Land Management (BLM) administers scattered parcels of public land within the Project Vicinity² downstream of New Bullards Bar Reservoir, but none of the land administered by BLM is within the FERC Project Boundary. YCWA is the major private landowner in the Project Area. New Bullards Bar Reservoir, the main Project storage reservoir, is located 11 miles north of Nevada City (which is in Nevada County), and 30 miles northeast of the City of Marysville in Yuba County. Powerhouses and associated facilities downstream from New Bullards Bar Dam are closer to Marysville than the 30 miles described above. The Project's New Bullards Bar Reservoir and Log Cabin Diversion Dam are located near California State Highway 49, and the Narrows 2 Powerhouse, just below USACE's Englebright Reservoir, is near State Highway 20. However, none of the Project facilities are visible from these state highways. Marysville Road (County Road 8) provides access to New Bullards Bar Dam and Reservoir, crosses the dam, and provides views of the reservoir and access to the recreation facilities associated with the reservoir.

¹ For the purposes of this document, the Project Area is defined as the area within the FERC Project Boundary and the land immediately surrounding the FERC Project Boundary (i.e., within about 0.25-mile of the FERC Project Boundary) and includes Project-affected reaches between facilities and downstream to the next major water controlling feature or structure, the USACE's Daguerre Point Dam.

² For the purposes of this document, Project Vicinity is defined as the area surrounding the Project on the order of a United States Geological Survey (USGS) 1:24,000 topographic quadrangle.

Timber, wildlife management, gold mining, and grazing are the primary land uses in the Project Vicinity from New Bullards Bar Dam to the upper reaches of the Project. Downstream of the Project, the primary land use is grazing, with scattered ranching/residential sites and some timber and wildlife management. In addition, recreation uses are focused at New Bullards Bar Reservoir and along parts of the Yuba River and its tributaries. Hydroelectric facilities including reservoirs, dams, powerhouses, penstocks, and transmission lines are established elements within this landscape setting.

The visual character of the landscape setting encompasses moderately rugged, forested terrain with deeply incised river canyons in the upper half of the Project Area. This terrain is typical for lower elevations in the Sierra Nevada. The lower half of the Project Area is located in the Sierra foothills and is characterized by rolling open terrain with incised river canyons. Lush and dense mixed conifer forest including ponderosa and sugar pine, Douglas and white fir, incense cedar, black oak, and madrone dominate the vegetative pattern in the upper half of the Project (USFS 1990). At lower elevations, oak woodlands and grasslands interspersed with chaparral, dominate the vegetative pattern, with alder and willow occurring along the riparian corridors (Yuba County 1973). Elevations within the Project Vicinity range from 4,027 feet at Alaska Peak to 300 feet along the Yuba River just below the Narrows 2 Powerhouse. People experience closed-in views due to the dense forest in the upper half of the Project Area. New Bullards Bar Reservoir is a major visual attraction due to the wide expanse of water and open views afforded on and beside the reservoir. New Bullards Bar Reservoir is also associated with camping and boating recreation opportunities.

The visibility of Project facilities to the public varies widely. New Bullards Bar Dam and Reservoir are highly visible due to road access and the use of the reservoir for boating, fishing, and water skiing. The dam is also a viewing attraction due to the dramatic height (645 feet) of the dam. Our House Dam and New Colgate Powerhouse have paved access but low use. Public viewing of Log Cabin Diversion Dam and Narrows 2 Powerhouse is very limited because access to the facilities is gated and locked and the facilities are tucked down in steep river canyons where there is virtually no public access. However, some people do access the rivers for fishing, but this access is difficult due to rugged terrain and dense vegetation, so the numbers of people who view these sites are quite low.

7.10.3 Aesthetic Resource Management Plans

7.10.3.1 Forest Service Land and Resource Management Plans for the Tahoe National Forest and the Plumas National Forest

Approximately 4,228 acres of the area within the Federal Energy Regulatory Commission (FERC) Project Boundary³ are located on NFS land. This represents about 54 percent of the total area within the FERC Project Boundary. All of the NFS lands within the Project Boundary are located around New Bullards Bar Reservoir and Dam or around the Project facilities of Our House Diversion Dam, Lohman Ridge Diversion Tunnel, Log Cabin Diversion Dam, and

³ The existing FERC Project Boundary is the area that Licensee uses for normal Project operations and maintenance, and is shown in Exhibits G, J, and K of the current license.

Camptonville Diversion Tunnel. NFS lands are not associated with New Colgate Power Tunnel and Penstock, New Colgate Powerhouse and Switchyard, Narrows 2 Powerhouse and Penstock Project facilities.

TNF and PNF Land and Resource Management Plans (LRMPs) established Visual Quality Objectives (VQOs) for areas within the TNF and PNF and specified desired visual outcomes for management activities and projects to meet adopted VQOs (USFS 1988 and USFS 1990). Management activities are evaluated in light of the adopted VQOs, as well as TNF's and PNF's LRMP Management Area policies and prescriptions. The VQO standards applicable to the above-ground portions of the Project are "Retention," "Partial Retention," and "Modification." Table 7.10.3-1 below describes the three VQOs in detail. The overall goal of the Forest Service visual quality standard is for land use activities to blend substantially into the landscape so as not to appear noticeable (USFS 1990).

Table 7.10.3-1. Forest Service Aesthetic Visual Quality Objectives in the Project Vicinity.

Visual Quality Objectives	Description	Sections of Project Vicinity Within Class	
Retention	"Management Activities may only repeat form, line, color, and texture, which are frequently found in the characteristic landscape. Changes in their qualities of size, amount, intensity, direction, pattern, etc., should not be visually evident."	New Bullards Bar Dam and Reservoir, including foreground views from the Reservoir.	
Partial Retention	"Management Activities may repeat form, line, color, or texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinated to the characteristic landscape."	Areas seen in middle ground from New Bullards Bar Reservoir.	
Modification	"Management Activities of vegetative and landform alteration must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area. Additional parts of these activities such as structures, roads, slash, root wads, etc. must remain visually subordinate to the proposed composition."	Our House Diversion Dam and Log Cabin Diversion Dam.	

Source: USFS 1974

In addition to forest-wide management goals, the TNF and PNF LRMPs provide standards and guidelines pertinent to aesthetics and visual resources for specific management areas. Our House Diversion Dam and Log Cabin Diversion Dam are located in TNF's 024 Oregon Management Area. New Bullards Bar Reservoir and Dam are located in TNF's 034 Bullards Bar Management Area and PNF's 11 Challenge Management Area. The corresponding visual policies that are applicable to individual Project features are discussed in Section 7.10.4.

7.10.3.2 BLM Sierra Resource Management Area

No BLM-administered public land occurs within the FERC Project Boundary. However, there is a small, BLM-administered parcel near New Colgate Powerhouse and additional parcels of BLM land along the North Yuba River below New Bullards Bar Dam continuing below USACE's Englebright Dam and along the Middle Yuba River. These lands have not been identified by BLM as Visual Resource Management (VRM) areas in either the Sierra or Eagle Lake resource management plans (RMP); therefore, these lands receive a VRM Class III.

The Sierra RMP (BLM 2008) assigns inventory classes to visual resource areas within the Sierra Resource Management Area (RMA). Management activities are evaluated in light of the adopted VRM class. The VRM classes of areas within or near the Project Vicinity are Class I,

Class II, and Class III. Table 7.10.3-2 below describes the three classes in detail. The overall goal of the VRM classes is to retain the existing visual quality of the landscape. The Sierra RMP goal described for BLM lands is to "Protect and enhance the scenic and visual integrity of the characteristic landscapes."

Table 7.10.3-2. BLM Visual Resource Management Objectives.

Visual Resource Management Class	Description	Sections of Project Vicinity Within Class
Class I	"To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention".	North Fork American Wild and Scenic River. Not in Project Vicinity.
Class II	"To retain the existing character of the landscape. The level of change to the characteristic landscape should be low."	South Yuba River Management Plan. Near but not in Project Vicinity
Class III	"To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate."	All other BLM areas. New Colgate Powerhouse access road and penstock.

7.10.3.3 United States Army Corps of Engineers Management Direction

The USACE owns, operates and has management responsibilities for Englebright Reservoir and Dam as well as lands acquired for purposes associated with the reservoir. These lands are located primarily at the northern half of Englebright Reservoir and some land adjacent to the dam. USACE does not have a formal visual management system but does have a master plan. The Harry L. Englebright Lake, Yuba River California 1975 Master Plan under G—Scope states:

• [This plan] is intended to serve as a guide for the further development of public use facilities and protection of scenic, biological, and recreational resources consistent with the authorized purposes of the project and other project purposes.

Descriptions in the master plan of steep topography, limited road access, and boating recreation, make it clear the focus is on managing boating recreation and protecting scenic values associated with views from the reservoir surface. Due to gated access to the powerhouse, limited public roads, and steep topography there is very little opportunity for the public to see the Narrows 2 Powerhouse and access road.

7.10.3.4 County General Plans

The Project is located primarily within Yuba County, with a small portion in Sierra County, and a very small portion in Nevada County. Aesthetic goals and plan direction for all three counties are described below.

7.10.3.4.1 Yuba County General Plan

Most of the Project Area lies within Yuba County. Currently, the Yuba County General Plan (Yuba County 1973) is in the process of being updated. Part of the updating process resulted in a document titled *Yuba County Environmental Setting and Background Paper* that summarizes the environmental setting and describes direction for aesthetics in the 1973 Plan as follows:

Local Regulation and Planning for Aesthetics Resource Protection

The Yuba County General Plan, Open Space and Conservation Element (OSC) (Yuba County 1973), has as its general goal, "To maintain and enhance the natural resources, open space land uses, and scenic beauty of Yuba County in order to protect the quality of the environment, the County's economy, and the health and well-being of present and future residents." In support of this goal is a policy to "encourage the preservation and enhancement of the natural features of the County, including rivers and areas of scenic beauty, and native vegetation." The OSC, along with the Yuba County *Circulation Plan* (1970), designated scenic roads and highways, and has thus made a commitment to preserving their scenic values.

Transportation and Circulation Plan, County Roadways, Scenic Corridors

Because of the special qualities of certain areas of Yuba County, those roads traversing this area are recommended in the current *Circulation Element* for protection by special ordinances to enhance scenic view sheds. They are 1) New Route (Marysville Road to Nevada County), and 2) State Route [Highway] 49. Nine other roads are listed following State Route 49.

7.10.3.4.2 Sierra County General Plan

The northern shoreline of Our House Diversion Dam lies within Sierra County. In the Sierra County General Plan (Sierra County 1996), under the Land Use Element, fundamental goals were set that address aesthetic goals for county lands as follows:

- It is the County's most fundamental goal to maintain its culture, heritage, and rural character and preserve its rural quality of life.
- It is the County's goal to defend its important natural features and functions. These have included and always will include scenic beauty, pristine lakes and rivers, tall mountain peaks, and rugged forested canyons, abundant and diverse plants and animals, and clean air, water, and watershed values.

Sierra County Zoning Code includes a scenic highway designation for State Highway 49 and State Highway 89 under 15.12.280 SC Scenic Highway Corridor District stating the following purpose:

"Purpose: To protect the scenic qualities of public highways designated a scenic highway by
the State of California and/or the Board of Supervisors. To protect the recreational, social,
and economic values derived from the protection and enhancement of the scenic qualities of
the County for the benefit of residents and visitors."

7.10.3.4.3 Nevada County General Plan

The southern shoreline of Our House Diversion Dam lies within Nevada County. In the Nevada County General Plan (Nevada County 1996), the following aesthetic goals were described for county lands:

- Promote and provide for aesthetic design in new development that reflects existing character.
- Protect and preserve important scenic resources.
- In addition, Nevada County, with assistance from CalTrans, has designated roads in or near the Project Vicinity as scenic highways. Scenic route designations include:
 - > State Highway 20 from near Grass Valley to Interstate 80 near Emigrant Gap
 - > State Highway 49 throughout the entire County
 - ➤ Highway 174 throughout the entire County
 - ➤ Interstate 80 throughout the entire County
 - ➤ Highway 89 throughout the entire County

7.10.4 Aesthetic Character in the Project Area

The following section provides a description of the existing visual resources found in the Project Area, as well as applicable Forest Service Visual Management System (VMS) VQOs. Photos of Project facilities and features are located at the end of Section 6.0, Project Location, Facilities, and Operations. Descriptions of facilities are based on Yuba River Development Project Relicensing Preliminary Summary (YCWA 2009c).

7.10.4.1 New Colgate Development

The New Colgate Development, from higher to lower elevation, consists of Our House Diversion Dam and Impoundment, Lohman Ridge Diversion Tunnel, Log Cabin Diversion Dam and Impoundment, Camptonville Diversion Tunnel, New Bullards Bar Reservoir, New Bullards Bar Dam and Spillway, New Colgate Power Tunnel and Penstock, and New Colgate Powerhouse and adjacent Switchyard. The tunnels are below ground and not visible and therefore will not be addressed further. Below is a description of each facility, the public visibility of the facility, an aesthetic description, and a summary table.

7.10.4.1.1 Our House Diversion Dam and Impoundment

Our House Diversion Dam is located on the Middle Yuba River 12 miles upstream from the confluence with the North Yuba River. The diversion dam and impoundment are located fully on TNF lands. The access road is located primarily on private land and some TNF land. The dam is 70 feet high and 368 feet long. The elevation at the crest of the dam is 2,049 feet. The Lohman Ridge Diversion Tunnel begins at the edge of this impoundment. The dam and impoundment are nestled deep in the Middle Yuba River canyon, which was formed by the Middle Yuba River. Lush mixed conifer is the dominant vegetation type in the canyon. The access road to the site is a paved narrow road open to the public. There is light public use at this facility and local foreground views on site. Views from further away are screened due to dense vegetation and its location deep in the Middle Yuba River canyon. People fishing at the impoundment or on the river are the primary users who see this facility.

This dam and impoundment are in TNF's 024 Oregon Management Area. The VQO for this area is Partial Retention for areas viewed in middle ground from State Highway 49, and Modification for the rest of the Management Area (USFS 1990). The dam and impoundment are located in a Modification VQO area.

The Sierra County General Plan (Sierra County 1996) under the Land Use Element established "Fundamental Goals." The relevant goal for Our House Diversion Dam and Impoundment is as follows:

• 2. It is the County's goal to defend its important natural features and functions. These have included and always will include scenic beauty, pristine lakes and rivers, tall mountain peaks, and rugged forest canyon, abundant and diverse plants and animals, and clean air, water, and watershed values.

The County's General Plan set out aesthetic goals for county lands. The relevant goal for Our House Diversion Dam and Impoundment is as follows:

• Protect and preserve important scenic resources.

7.10.4.1.2 Log Cabin Diversion Dam and Impoundment

Log Cabin Diversion Dam is located on Oregon Creek, a tributary to the Middle Yuba River. The dam is located approximately 4 miles upstream from the confluence with the Middle Yuba River. The dam and impoundment are located on NFS lands and YCWA lands. The access road is located on both NFS and private lands. Camptonville Diversion Tunnel begins at the edge of this impoundment. The access road to this site is closed to the public by a locked gate at the top of the canyon. There is little public use at this facility except for people willing to walk down the steep road for fishing or other dispersed use. There are no other public views of this site from local roads or Forest Service roads primarily due to dense vegetative screening and the site's location deep in the Oregon Creek canyon.

The dam and impoundment are in TNF's 024 Oregon Management Area. The VQO for this area is Partial Retention for areas viewed in middle ground from State Highway 49 and Modification for the rest of the management area (USFS 1990). The dam and impoundment are within a zone mapped for Partial Retention, but due to vegetative and topographic screening are not seen; therefore, this facility would be managed for a Modification VQO.

Yuba County's General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Plan "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

7.10.4.1.3 New Bullards Bar Reservoir

New Bullards Bar Reservoir is located on the North Yuba River. It is a large reservoir, which at normal maximum pool covers 4,790 acres and creates a shoreline of 71.9 miles. The normal

maximum water surface elevation is 1,956 feet, and the reservoir extends upstream on the North Yuba River for about 8.5 miles from the dam. The water surface feels wide open near the two boat ramps and dam and then slowly narrows into a steep canyon as it meets the North Yuba River.

Mixed conifer interspersed with black oak and madrone is the dominant vegetation type. NFS lands north of the North Yuba River and New Bullards Bar Reservoir are part of the PNF. NFS lands to the south are part of the TNF. TNF, under agreement with PNF, manages all the recreation facilities around the reservoir under agreement with Licensee (Special Use Permit USFS 1991). The Emerald Cove Marina near the dam provides a boat launch, boat rentals, houseboat rentals, a store, and dock space for boats and houseboats, and is run by a concessionaire. There are seven other developed recreation facilities: Hornswoggle Group Campground, Schoolhouse Campground, Dark Day Campground, Dark Day Boat Ramp, Garden Point Campground, Madrone Cove Campground, and Vista Point Picnic/Day Use Site.

The major access road to New Bullards Bar Reservoir is Marysville Road (County Road 8) which branches off of State Highway 49 north of the Middle Yuba River. There are local and Forest Service gravel roads that provide access primarily for timber management that surrounds the reservoir, but none of these roads provide significant public views of the reservoir. The primary view of the reservoir from a road is from Marysville Road (County Road 8) as it approaches, and crosses, the dam. A hiking and biking trail starts at TNF Vista Point and parallels the southeast shoreline almost to Camptonville. This trail provides occasional views of the reservoir. The main viewing opportunity of the reservoir is by boaters using the water surface for fishing, water skiing, and boating. The other views are from the two boat-in campgrounds, the boat ramps, and one local access road on the north side of the reservoir.

New Bullards Bar Reservoir is in TNF's 034 Bullards Bar Management Area. The VQOs for this area are Retention in foreground as viewed from New Bullards Bar Reservoir and recreation sites and Partial Retention for the remainder of the management area, including developed recreation sites. The north side of New Bullards Bar Reservoir is in PNF's 011 Challenge Management Area. Management Area direction is to maintain pleasing visual corridors. The VQOs are the same as TNF's VQOs, which are Retention and Partial Retention for New Bullards Bar Reservoir.

Yuba County's General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Element "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

7.10.4.1.4 New Bullards Bar Dam and Spillway

New Bullards Bar Dam and Spillway are located on the North Yuba River about 2.3 miles above the confluence with the Middle Yuba River. The dam is 645 feet high and is a 1,110 foot-radius double curvature concrete arch dam. The maximum elevation of the dam is 1,965 feet. The spillway associated with the dam is 106 feet wide with a crest elevation of 1,902 feet. There are

three control gates, each 30 feet wide and 54 feet high, with a combined maximum design capacity of 160,000 cubic feet per second (cfs).

Marysville Road drops slightly down to the dam and spillway and provides access to the dam. There is an interpretive stop just southeast of the dam that provides a view of the reservoir and dam. Due to the spectacular height of the dam, people sometimes stop to look at the dam and the canyon below. The dam is also viewed from boaters on the reservoir. Views of the downstream side of the dam are limited by a fence and lack of a walkway on the downstream side. Mixed conifer and hardwoods are the dominant vegetation types (USFS 1990).

As described above, there are TNF lands south of the dam and PNF lands to the north of the dam, but the dam and spillway facility are located on private land owned by Licensee. Yuba County General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Element "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

7.10.4.1.5 New Colgate Power Tunnel and Penstock

New Colgate Power Tunnel and Penstock starts just west of New Bullards Bar Dam and extends to the southwest 5.2 miles to the New Colgate Powerhouse on the Yuba River. The tunnel is not visible to the public and therefore will not be discussed further. The 2,809-foot long penstock drops down to the powerhouse at the end of the tunnel. The penstock is between 9 feet and 14.5 feet in diameter, is located on the surface of the ground, and is at a steep angle facing down a steep hillside. The penstock is located on land owned by the Licensee. While potentially visible, few people see the penstock due to the remote public access to the canyon. Lake Francis road just south of Dobbins provides public access near the penstock up to the locked gate for the New Colgate Powerhouse. People fishing or hiking in the canyon on the North Yuba River can see the penstock, but the numbers are few due to the remote access and rugged terrain. It is possible that people can see the penstock from an isolated parcel of BLM land less than 0.5 miles south of the powerhouse. The predominant vegetation types are oak woodlands, grasslands, and chaparral transitioning to mixed conifer depending on soil type and slope aspect to the sun.

Yuba County's General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks."

7.10.4.1.5 New Colgate Powerhouse and Switchyard

New Colgate Powerhouse and Switchyard are located along the North Yuba River adjacent to the penstock and approximately 3 miles due north of the South Yuba River State Park at Bridgeport (Pleasant Valley Road). Access to the powerhouse and switchyard is by a paved road off of Lake Francis Road just south of Dobbins. Views of this area (similar to those for the penstock) are quite limited and consist primarily of people fishing or hiking in this remote rugged canyon. Views of the facilities from Lake Francis Road are very limited due to the location deep in the canyon.

These facilities are on private land owned by Licensee and subject to Yuba County Plan direction, not Forest Service VQOs. BLM has a possible interest because BLM lands are located in the Yuba River Canyon nearby including a parcel on the opposite canyon wall. The predominant vegetation types are oak woodland, grassland, and chaparral transitioning to mixed conifer depending on soil type and slope aspect to the sun.

Yuba County General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks...".

The aesthetic character of Project features within the New Colgate Development is summarized in Table 7.10.4-1.

Table 7.10.4-1. Aesthetic character of Project features within the New Colgate Development.

Table 7.10.4-1. Aesthetic character of Project features within the New Colgate Development.							
Existing Project Feature	Elevation (feet)	Form of Access	Relationship to Land Form	Predominant Vegetation	Visibility from Surrounding Areas	Relative Number of Viewers	USFS Visual Objectives
Our House Diversion Dam	2,049 feet at dam crest	Paved road from Pliocene Ridge Road	Inundated stream valley	Mixed conifer and hardwoods	Local views on site	Low	Modification VQO
Log Cabin Diversion Dam	Elevation not listed	Gated access road from State Hwy. 49	Inundated stream valley	Mixed conifer and hardwoods	Very low – limited access	Very Low	Modification
Bullards Bar Reservoir	1,956 feet at full pool	Marysville road and boat ramps	Inundated stream valley	Mixed conifer and hardwoods	Moderate to high. Visibility primarily from recreation sites and boating	High number of viewers	Retention VQO in foreground and Partial Retention in middle ground
Bullards Bar Dam and Spillway	1,965 feet at crest	Marysville road from State Hwy. 49	Inundated stream valley	Mixed conifer and hardwoods	High visibility from local views from Marysville road and Bullards Bar Reservoir	High number of viewers	Retention VQO in foreground and Partial Retention in middle ground
New Colgate Penstock	Elevation not listed	Gated access road Lake Francis Road	Steep side hill of deep river canyon	Oak woodland, grassland, and chaparral Transitioning to mixed conifer	Very low – limited access	Very Low	County plan direction BLM Class III
New Colgate Powerhouse and switchyard	Elevation not listed	Gated access road Lake Francis Road	At the bottom of rugged steep canyon	Oak woodland, grassland, and chaparral transitioning to mixed conifer	Very low – limited access	Very Low	County plan direction BLM Class III

7.10.4.2 New Bullards Minimum Flow Development

The New Bullards Minimum Flow Development consists of New Bullards Minimum Flow Powerhouse Penstock, New Bullards Minimum Flow Powerhouse, New Bullards Minimum Flow Transformer, and appurtenant facilities and features. Below is a description of each facility, the public visibility of the facility, an aesthetic description, and a summary table.

7.10.4.2.1 New Bullards Minimum Flow Powerhouse Penstock

New Bullards Minimum Flow Powerhouse Penstock is a 70-foot long and 12-inch diameter steel pipe located at the bottom of the North Yuba River canyon next to New Bullards Bar Dam.

Predominant vegetation in the area is mixed conifer and oak woodland transitioning to riparian vegetation along the North Yuba River. The penstock is visible from the top of the dam if a viewer takes the time and effort to locate the penstock. Most people would not see this facility due to limited access and fencing that restricts views downstream close to the dam. The penstock is located on private land owned by Licensee.

Yuba County's General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Element "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

7.10.4.2.2 New Bullards Minimum Flow Powerhouse and Transformer

New Bullards Minimum Flow Powerhouse and transformer are small facilities located at the bottom of the North Yuba River canyon next to New Bullards Bar Dam. Predominant vegetation in the area is mixed conifer and oak woodland transitioning to riparian vegetation along the North Yuba River. Both the powerhouse and the transformer are visible from the top of the dam but quite small in comparison to the size of the dam. As discussed above, views downstream of the dam are limited by fencing and lack of a walkway on the downstream side of the dam. The powerhouse and transformer are located on private land owned by Licensee.

Yuba County's General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Element "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

7.10.4.2.3 Appurtenant Facilities and Features

The appurtenant facilities and features are primarily an access road down to the bottom of the dam and associated facilities. The road is located on the east facing slopes, slowly working its way to the bottom of the dam. Predominant vegetation in the area is mixed conifer and oak woodland transitioning to riparian vegetation along the North Yuba River. The access road is visible primarily from the southeast end of the dam. As the road heads to the south and climbs up the canyon wall, the road becomes less visible from the dam as it gets further away. The road is located on a combination of private land owned by Licensee, other private lands, and a short segment across PNF lands.

Yuba County General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..." and from the Circulation Element "enhance scenic view sheds" from scenic roadways including Marysville Road and State Highway 49.

The aesthetic character of Project features within the New Bullards Minimum Flow Development is summarized in Table 7.10.4-2.

Table 7.10.4-2. Aesthetic character of Project features within the New Bullards Minimum Flow Development.

Visibility from Existing Relative Elevation Form of Relationship to Predominant County Plan **Project** Surrounding Number of (feet) Access **Land Form** Vegetation direction Viewers **Feature** Areas Low for moving Yuba County: New Bullards vehicles. High Moderate for encourage powerhouse, Approx. Gated Access Bottom of steep Mixed conifer and for the few vehicles. preservation and viewers who get Low for penstock, and 1,320 feet oak woodland Road canyon enhancement of transformer off the sidewalk pedestrians natural features to view the dam. Low for moving Yuba County: From vehicles. High Moderate for Appurtenant approx. 2.5 mi. road encourage On the steep Mixed conifer and for few viewers vehicles. facilities and 1,900 feet from Oregon preservation and oak woodland canyon wall who get off the Low for Hill road features down to enhancement of sidewalk to view pedestrians 1,300 feet natural features

downstream.

7.10.4.3 Narrows 2 Development

The Narrows 2 Development consists of Narrows 2 Powerhouse Penstock, Narrows 2 Powerhouse, Narrows 2 Switchyard, and appurtenant facilities and features. The Narrows 2 Penstock is a tunnel below ground, is not visible to people, and therefore will not be addressed further. Below is a description of each facility, the public visibility of the facility, an aesthetic description, and a summary table.

7.10.4.3.1 Narrows 2 Powerhouse and Switchyard

The Narrows 2 Powerhouse and Switchyard are located about 300 feet downstream from the base of Englebright Dam on the west side of the Yuba River in a deep, rugged canyon. The powerhouse is an above-ground, concrete powerhouse (YCWA 2009). Across the river and downstream by about 0.5 mile is Narrows 1 Powerhouse, which is owned and operated by Pacific Gas and Electric Company (PG&E) as part of its Narrows 1 Project (FERC Project No. 1403). Predominant vegetation in the area is annual grassland, scattered chaparral, and other vegetation. This facility is relatively difficult for the public to view because there is a gate across the road access to the powerhouse, which is located at the bottom of the canyon out of general view. Some people fish or hike in the canyon below Englebright Dam and can view the powerhouse, but the numbers are few due to difficult access and rugged terrain. BLM lands are more than a mile downstream from the powerhouse and switchyard. From BLM lands there are no views of the powerhouse and switchyard.

The powerhouse and switchyard are on private lands. The VRM is Class III for BLM lands southwest of the powerhouse and over one mile downstream. Yuba County General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..."

7.10.4.3.2 Appurtenant Facilities and Features

The appurtenant facility and feature of note is primarily the access road to the powerhouse. The access road is located on the north side of the Yuba River and cuts across a steep slope down to

Narrows 2 Powerhouse. Predominant vegetation on this hillside is annual grasses, oak woodland, and chaparral. This road is visible to scattered residences in the area as it starts down the steep canyon walls. The further it descends into the canyon, the less visible the road is to the public. Some people who fish or hike in the canyon along the Yuba River can see this road, but their numbers are very small. The access road crosses primarily State-owned land with a small amount of private land. The closest BLM lands are more than a mile downstream from the dam and do not have views of the dam at USACE's Englebright Reservoir or its access road. Yuba County General Plan policy is to "encourage the preservation and enhancement of the natural features of the County, including rivers and streams and their banks..."

The access road to the Narrows 2 Powerhouse crosses University of California lands (State Lands) for over a mile and then crosses private land as it approaches Scott Forbes Road. The University of California lands are managed under the auspices of the Sierra Foothill Research Extension Center and Field Station, which is part of the Agriculture and Natural Resources branch of the University system. The main purposes of the Field Station are to promote research tied to cattle grazing in the foothills and associated issues such as water quality issues related to grazing, management of the oak woodland resources, and effects of both grazing and logging to wildlife and other natural resources. The Sierra Foothill Research and Extension Center Strategic Plan 1993/1994 (UCANR 1994), focuses on research needs and opportunities. There is no mention of aesthetics or scenery as a resource or management issue and there is no discussion of how activities next to their lands might affect their research activities. Bill Frost, Associate Director of the Research Extension Centers, UC Davis, confirmed by phone that Research Extension Centers do not have formal direction for aesthetic issues and would address them on a case by case basis primarily related to how aesthetic concerns might affect research goals and activities. (B.Frost, pers.comm., 2009)

The aesthetic character of Project features within the Narrows 2 Development is summarized in Table 7.10.4-3.

Table 7.10.4-3. Aesthetic character of Project features within the Narrows 2 Development.

Existing Project Feature	Elevation (feet)	Form of Access	Relationship to Land Form	Predominant Vegetation	Visibility from Surrounding Areas	Relative Number of Viewers	BLM Visual Objectives
Narrows 2 Powerhouse and Switch- yard	Just above 300 ft at the river	Gated Access Road	Bottom of steep canyon	Riparian and annual grassland	Very low limited access	Very low	Class III
Appurtenant facilities and features	Just above 300 ft to top of the canyon	1.75 mi. road from Scott Forbes road	On the steep canyon wall	Annual grassland, oak woodland, and chaparral	Low – limited access	Very low	Class III

7.10.5 List of Attachments

None.

Page Left Blank